
I. *A Letter from Dr. George Mackenzie, to Sir Hans Sloane, Bar. Coll. Med. Lond. Praef. concerning the Coati Mondi of Brasil.*

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Y
OU know that the *Coati Mondi* of *Brasil* is sel-dom or never brought alive into *Europe*; yet there were two of them found in Capt. *Green's* Ship, who was some Years ago try'd and condemn'd here for Piracy, one of which being given in Compliment to my Lady *Seaford*, dy'd in my Custody of a Wound it had received in the Thigh, which I caused to be dis-sected, and have sent you the Account of it, compared with that which the *Parisian* Academists publish'd of one of them; and which differs from theirs in several Particulars, most of which, as I believe, may proceed from the Difference of Sex, theirs being a Male, and ours a Feinale.

Theirs was six Inches and an half from the end of the Snout to the hinder part of the Head, ours was only four; theirs was sixteen Inches from the *Occiput* to the Beginning of the Tail, ours was ten; theirs from the Insertion of the Tail to the End was thirteen Inches, ours twelve; theirs from the Top of the Back to the Extremity of the fore Feet was ten Inches, ours was seven; theirs from the Top of the Back to the Extremity of the hinder feet was twelve Inches, ours eight; the Snout of theirs was very long and moveable, like

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that of a Hog, but straighter and longer in Proportion, but ours was only two Inches; the four Paws had each five Toes, the Claws of which were black, long, and hollow, like those of the Castor; the Toes of the Fore-paws were a little longer than those of the Hind-paws; the Soles without Hair; the Palms and Soles of these Fore-paws were covered with a soft and tender Skin; the Sole of the hinder Paw was long, having a Heel, at the Extremity of which there were several Scales a Line broad, and five or six long, in all which they perfectly agreed.

The Ears were round, like those of Rats, and covered at the Top with very short Hairs, and in this they likewise both agreed, as they did in the Eyes, which were extreamly small and beautiful, but there was some Difference in the Hair; for theirs was short, rough and knotty, blackish on the Back and Head; and the rest of the Body mixt with black and red; but in ours the Hair was long, in Proportion to the Animal, especially on the Tail, and the whole was beautified with white and black Circles, which made it have a most lovely Aspect: But from the Snout down all the Throat and Belly to the top of the Tail and the inside of the Legs, was of a reddish Colour. The Tongue of both theirs and ours was chopt with several Fissures or Strokes, which made it rough to the Touch. The *Incisores* were six in each Jaw: The *Canini* were very large, especially those of the lower Jaw; but they did not turn up like Tusks as theirs did; their Figure was not round, blunt, or white, like those of a Dog, Wolf, or Lyon, but sharp, by the means of three Angles, which at the Extremity form'd a Point sharp like an Awl: As to their Colour, they were greyish and somewhat transparent: The *Gula*

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was large, and cleft like a Hog's ; and the lower Jaw, as in a Hog, very much shorter than the upper.

We shall now proceed to the internal Parts. By the Dissection we found in ours, as the *Parisian* Academists did in theirs, that under the Skin, and between the Muscles, there was a great deal of Fat, white and hard, like Tallow. Theirs being a Male had a *Penis* provided with a Bone, whose Length did in proportion exceedingly surpass that of the Bones which are found in the *Penis* of other Animals ; so we in ours, being a Female, observed, that it had an exceeding large *Matrix*, and that the Insertion of the *Urethra* was upon the right Side of the *Vagina*. The *Epiploon* in ours, as in theirs, was very small ; it had little Fat, and was a Complication of Fibres and Fillets, rather than a Membrane ; it was not laid upon the Intestines, but touched upon the Ventricle. In theirs they observed a very large Spleen, but in ours we could discern none. We did not observe more than they any Vessels in the external Membrane of the Ventricle, but the *Coronaria Stomachica*, which appear'd as in theirs towards the upper Orifice, and soon disappear'd, shooting forth a few Branches. The Liver in ours, like theirs, was somewhat blackish, and of a Substance very homogeneous, without any Appearance of Glands : It had seven Lobes, two great ones on the left Side, and five other small ones on the right Side. The *Pancreas* in ours, as in theirs, was fastened along the *Duodenum*, inclining more towards the right Kidney than the left ; but whereas it was very small in theirs, it was very large in ours. The *Mesentery* in ours, as in theirs, was filled with a very hard Fat, which inclosed and almost concealed all its Vessels. The *Intestines* in theirs were seven Foot long, and all of one Thickness, having

nothing to distinguish them; but in ours they were only 42 Inches and a half. Theirs had no *Cæcum*, but we found it in ours at the upper end of the *Rectum*. The Bladder was very large; the right Kidney in ours, as in theirs, was a great deal higher than the left, and covered with the Lobes of the Liver. The Lungs in theirs had five Lobes, two on the right Side and two on the left, and the fifth in the *Mediastinum*, which was as thin as a Spider's Web; but in ours there was seven Lobes, three on the right and three on the left, and the seventh in the Middle. The *Heart* in ours, as in theirs, resembled that of a Dog, having the right Auricle extreamly great, and as they found a great deal of slimy Matter hardened in the right Ventricle, so we found in ours a *Polypus*. The *Musculus Crocophites* passing under the *Zygoma* was in ours, as in theirs, fastened there, being extraordinary fleshy even to its Insertion, made by a very large Tendon, which was inclosed between two Pieces of Flesh, much thicker than those which are generally found in this Place, and which are thought to be put there to defend and strengthen the Tendon of the Muscle of the Temples.

The Tendons in the Articulations of the fore Feet were very big and strong. In ours we observed two Glands on each Side of the *Anus*, with a Passage to each of them, full of a greyish foetid Matter. The *Orbita* in ours, like theirs, was not bony throughout, but it was supply'd in the upper Part by a cartilaginous Ligament, which joined the *Apophysis* of the *Os Frontis* to that of the first Bone in the upper Jaw. The Bone, which separates the *Cerebrum* from the *Cerebellum*, was as in Dogs. The *Dura Mater* in ours did not adhere to the *Cranium*, as in theirs. The *Sinus's* of the

the *Os Frontis* in ours, as in theirs, were full of Matter, like a friable Fat. The *Mammillares Processus*, in ours, as in theirs, were very large. In the Eye both of them agreed exactly, the Globe not exceeding four Lines and a half in Diameter, the Aperture of the Lids being much larger, and the *Pupilla* being as large as the whole Globe of the Eye ; the Crystalline contained three Lines in Breadth, and two and an half in Thicknes, and was more convex inwards than outwards ; this Thicknes of the Crystalline made the two other Humours to be les in Quantity. The *Choroides* was all over of the same Colour, *viz.* of a very brown red, without any *Tapetum*, which is hardly ever wanting in the Eyes of other Animals.

These are all the remarkable Differences, that we could discover, betwixt ours and that of the *Parisian* Academists ; only I must inform you of some Things, as to the Manner of its Living and Diet, which they had not the Occasion to observe in theirs.

I believe they are misinform'd in saying, that they carry their Tails erected, at least the Tail of this was always trailing on the Ground ; neither can I be induced to believe that they eat their Tails, for there was no Part of her that she could endure les to be handled than her Tail, the least touching of which would make her cry, or rather hiss like a Snake ; she could endure no manner of Cold ; for in the Intervals betwixt the Times of eating, she was either beneath the Bed-cloaths, or on a Cushion before a Fire, with the Heat of which she seemed to be extreamly well pleased.

Her ordinary Meat was butter'd Eggs, Milk and Bread, all manner of roasted Flesh, but no Fish : I once try'd her with a new kill'd Partridge, which she eat.

eat of most voraciously, and, for several Days after, she was very wild and ungovernable, which made me never afterwards try her with raw Flesh. I am apt likewise to believe, their ordinary Dens or Habitations are under Ground in sandy Banks, like our Rabbits; for when she was brought to the Fields, she would dig up the Sands with her Paws, with an incredible Swiftnes, so that had she not been chain'd, there had been no Possibility of recovering her.

GEORGE MACKENZIE.

II. *Imber Calculorum inter aquarum Pyrmontanarum usum, in Viro, nunquam antehac calculum experto, ac alias perfecte sano, sub sequente postea mictu cruento, tandemque vesicæ ulcere. Communicante Viro Clarissimo Abrahamo Vatero, M. D. Anat. & Botan. Prof. Wittemb. R. S. S.*

Nobilis Pomeranus, sanus ac vegetus, uti ipse de se refert, nulliusque mali sibi conscius, ante hos tres annos, suasu amici, conversationis causa, socium se ipfi adjunxit, in bibendis aquis medicatis *Pyrmontanis*. Factum autem est, ut, cum potando aliquot dies transgisset, calculos quosdam minores, absque ullo quidem dolore, excludi inter mingendum sentiret. Effectum hunc criticum esse sibi persuadens noster, aquas istas aucta dosi bibere incipit, quo facto, quatuor vel quinque